Data Sheet
Fujitsu PRIMERGY TX150 S8 Mono-Socket Intel® Xeon® processor server

The one-processor tower server - maximized!

PRIMERGY TX tower servers are ideal for use in SMEs or branch offices. They increase operational efficiency by providing rock solid, record-breaking, energy efficient performance. That performance is built on 20-years of pioneering work in Green IT. As a customer, you benefit from a reduction in your organization's environmental impact and lower running costs. The reliability is proven by testing the machines through 5000 boot cycles – far more than other vendors do. PRIMERGY TX servers are also easy to manage via the PRIMERGY ServerView Suite, reducing IT admin workload and costs. Plus, tower to rack conversion kits are available for most TX systems, ensuring investment protection.

PRIMERGY TX150 S8

The PRIMERGY TX150 S8 stands for reliable and expandable server performance for SMEs, branch offices and virtualized environments. New to the PRIMERGY TX150 platform: The Intel® Xeon® E5 processor family provides a maximum of expandability in an one-socket server. Future demand is perfectly covered by 5 PCIe Gen2/3 expansion slots, up to 96 GB of memory and up to 16 hard disk drives. At the same time the optional redundant power supply units and fans ensure stable and reliable computing. And of course: Fujitsu's patented Cool-safe™ concept together with processors of the Intel® Xeon® E5-1400 and E5-2400 family guarantee best energy efficient performance.

Features and Benefits

Main Features	Benefits
Performance meets energy efficiency	
■ By combining the latest Intel® mono/dual-processor platform and SAS 2.0 hard disks with Fujitsu's engineering, you get best performance with low energy consumption	■ High performance and energy efficiency
High availability	
■ Hot plug hard disks: choose between max. 8x 3.5-inch or max. 16x 2.5-inch. Power supply units: choose between standard or redundant	■ High availability options to suit your business
Expandability	
■ Up to 96 GB of memory and 6 expansion slots	■ High expandability - the TX150 S8 grows with your business
Investment protection	
■ The PRIMERGY TX150 S8 can be integrated into a rack infrastructure with the tower to rack conversion kit	■ High versatility - increases your investment's lifetime
Service made easy	
■ The green touch points, the system ID card and the customer self-service module make servicing the TX150 S8 easier	■ High serviceability - saves your time

Technical details

PRIMERGY TX150 S8		
Housing types	Tower / Rack	Tower / Rack
Storage drive architecture	3.5-inch	2.5-inch
Power supply	Standard / Hot-plug	Standard / Hot-plug
Mainboard		
Mainboard type	D 3079	
Chipset	Intel® C602	
Processor quantity and type	1 x Intel® Pentium® processor / Intel® Xeon® processor E5-1400 product family / Intel® Xeon® processor E5-2400 product family	
Processor	Intel® Pentium® processor 1403 (2C/2T, 2.60 GHz, TLC: 5 MB, Turbo: No, 6.4 GT/s, Mem bus: 1066 MHz, 80 W)	
	Intel® Xeon® processor E5-1410 (4C/8T, 2.80 GHz, TLC: 10 MB, Turbo: Yes, 6.4 GT/s, Mem bus: 1333 MHz, 80 W)	
	Intel® Xeon® processor E5-2403 (4C/4T, 1.80 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1066 MHz, 80 W)	
	Intel® Xeon® processor E5-2407 (4C/4T, 2.20 GHz, TLC: 10 MB, Turbo: No, 6.4 GT/s, Mem bus: 1066 MHz, 80 W)	
	Intel® Xeon® processor E5-2420 (6C/12T, 1.90 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s , Mem bus: 1333 MHz, 95 W)	
	Intel® Xeon® processor E5-2430 (6C/12T, 2.20 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s , Mem bus: 1333 MHz, 95 W)	
	Intel® Xeon® processor E5-2430L (6C/12T, 2.00 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s , Mem bus: 1333 MHz, 60 W)	
	Intel® Xeon® processor E5-2440 (6C/12T, 2.40 GHz, TLC: 15 MB, Turbo: Yes, 7.2 GT/s , Mem bus: 1333 MHz, 95 W)	
	Intel® Xeon® processor E5-2450 (8C/16T, 2.10 GHz, TLC: 20 MB, Turbo: Yes, 8.0 GT/s , Mem bus: 1600 MHz, 95 W)	
Memory slots	6 (6 DIMMs, 3 channels with 2 slots per channel)	
Memory slot type	DIMM (DDR3)	
Memory capacity (min. - max.)	2 GB - 96 GB	
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Memory Mirroring support	
Memory notes	max. 96 GB registered; min. 2 GB unbuffered; Memory Mirroring with identical modules in both channel pairs of a bank (2 modules per bank). Rank sparing with identical modules within the same channel. Performance Mode with identical modules in all channels of each bank per CPU.	
Memory options	4 GB (1 module(s) 4 GB) DDR3 LV, registered, ECC, 1600 MHz, PC3-12800, DIMM	
	8 GB (1 module(s) 8 GB) DDR3 LV, registered, ECC, 1600 MHz, PC3-12800, DIMM	
	16 GB (1 module(s) 16 GB) DDR3 LV, registered, ECC, 1600 MHz, PC3-12800, DIMM	
Memory options	2 GB (1 module(s) 2 GB) DDR3 LV, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM	
	4 GB (1 module(s) 4 GB) DDR3 LV, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM	
Interfaces		
USB ports	9 x USB 2.0 (2x front, 4x rear, 3x internal for backup, UFM and internal USB)	
Graphics (15-pin)	1 x VGA	
Serial 1 (9-pin)	1 x serial RS-232-C, usable for iRMC or system or shared	
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet	
Service LAN (RJ45)	1 x dedicated management LAN port for iRMC S3 (10/100/1000 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port	

Onboard or integrated Controller		
RAID controller	additional RAID controller options are described under Components RAID controller	
SATA Controller	Intel® C602, 2 ports used for accessible drives 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;	
SATA controller type notes	On board SATA controller supports RAID levels 0, 1, 10	
Remote Management Controller	Integrated Remote Management Controller (iRMC S3, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible	
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)	
Slots		
PCI-Express 3.0 x4 (mech. x8)	2 x Full height 280 mm length	
PCI-Express 3.0 x16	1 x Full height 280 mm length	
PCI-Express 2.0 x1 (mech. x16)	1 x Full height 170 mm length	
PCI-Express 2.0 x4 (mech. x8)	1 x Full height 230 mm length; preferred RAID slot	
PCI-slots	1 x PCI 32/33 MHz, 1x long, 5V	
Slot Notes	in SAS configuration 1x PCI-Express occupied by modular RAID controller.	
Drive bays		
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA	
Notes accessible drives	all possible options described in relevant system configurator	
Drive bays (Base unit specific)		
Storage drive bays	Max 8 (4 + 4) x 3.5-inch	Max 16 (8+ 8) x 2.5-inch
Accessible drive bays	3 x 5.25/1.6-inch for 4 x 3.5-inch HDD/SSD, or 2 x 3.5-inch HDD/SSD + 1 x LTO + 1 x LSD 1 x 5.25/0.5-inch for slimline ODD	3 x 5.25/1.6-inch for 8 x 2.5-inch HDD/SSD + LTO/ODD, or 8 x 2.5-inch HDD/SSD + slim DVD + LSD
General system information		
Number of fans	4	
Fan configuration	3 + 1 redundant	
Fan notes	Redundant fan configuration is only available in combination with redundant PSU	
Operating panel		
Operating buttons	On/off switch NMI button Reset button	
Status LEDs	System status (orange / yellow) Identification (blue) Hard disks access (green) Power (amber / green) CPU status Fan status Hard disk error Temperature CSS (yellow) Memory status PSU status (green/ amber) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)	
Service display	Optional: ServerView Local Service Display (LSD)	

BIOS

BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server 2012
	Microsoft® Windows Server® 2012 Datacenter
	Microsoft® Windows Server® 2012 Standard
	Microsoft® Windows Server® 2012 Foundation
	Microsoft® Windows Storage Server 2012 Standard
	Microsoft® Hyper-V™ Server 2008 R2
	Microsoft® Windows Server® 2008 R2 Datacenter
	Microsoft® Windows Server® 2008 R2 Enterprise
	Microsoft® Windows Server® 2008 R2 Standard
	Microsoft® Windows® Web Server 2008 R2
	Microsoft® Windows® Small Business Server Essentials 2011
	Microsoft® Windows® Small Business Server 2011 Premium Add-On
	Microsoft® Windows® Small Business Server Standard 2011
	Microsoft® Windows® Server 2008 Datacenter
	Microsoft® Windows® Server 2008 Enterprise
	Microsoft® Windows® Server 2008 Standard
	VMware vSphere™ 5.0 Embedded
	VMware vSphere™ 5.0
	VMware vSphere™ 4.1
	VMware vSphere™ 4.1 Embedded
	VMware vSphere™ 4.1 Installable
	Novell® SUSE Linux Enterprise Server 11
	Novell® SUSE Linux Enterprise Server 10
	Novell® SUSE Linux Enterprise Server 10 with XEN
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
	Red Hat® Enterprise Linux 5 with XEN
	Citrix® XenServer®
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management	
Standard	ServerView Suite - Deploy SV Installation Manager SV Scripting Toolkit SV Deployment Manager (30-day trial version) ServerView Suite - Control SV Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) SV Performance Management SV Power Management SV RAID Manager ServerView Suite - Maintain SV Remote Management (iRMC) SV Update Management (BIOS, Firmware, Windows Drives and SV Agents) SV Asset Management SV Online Diagnostics ServerView Suite - Integrate SV Integration packs e.g. for Microsoft System Center, Nagios, HP, SIM, HP NNM, IBM Tivoli, Altiris Deployment Solutions and others
Option	ServerView Suite - Deploy SV Deployment Manager (full version) ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage ServerView Suite - Dynamize SV Virtual-IO Manager (VIOM) SV Resource Orchestrator Virtual Edition (ROR VE) SV Resource Orchestrator Cloud Edition (ROR CE) ServerView Suite - Integrate SV Integration pack for Fujitsu ManageNow® solution
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

Dimensions / Weight	
Floor-stand (W x D x H)	177 x 651 x 456 mm
Rack (W x D x H)	483 x 611 x 177 mm
Dimension notes	Floorstand Width 177 mm without tilt protection (420 mm with tilt protection); depth measured includes handles on redundant PSU. Rack depth includes handles of redundant PSU, excludes rack handles / front.
Height Unit Rack	4 U
Weight	16 - 29 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

Dimensions / Weight / Environmental (Base unit specific)	

Environmental	
Operating ambient temperature	10 - 35°C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	22 dB(A) idle mode/ 22 dB(A) operation mode with low noise mode; 30 dB(A) idle mode/ 30 dB(A) operation mode with SAS HDDs;36 dB(A) idle mode/ 36 dB(A) operation mode with HDD extension boxes;
Sound power (LWAd; 1B = 10dB)	4,0 B idle / 4,0 B operation mode with low noise mode; 4,8 idle mode/ 4,8 operation mode with SAS HDDs;5,4 B idle mode/ 5,4 B operation mode with HDD extension boxes;
Noise notes / description	Noise emissions and operation modes depend on system configuration.

Electrical values	
Power supply configuration	Base unit specific: 1x standard power supply or1x hot-plug power supply or 2x hot plug power supplies for redundancy
Standard power supply output	500 W (90 % efficiency, 80 PLUS gold)
Hot-plug power supply output	450 W (94 % efficiency, 80 PLUS platinum)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current max.	2.4
Rated current in basic configuration	pending
Active power (min. configuration)	65 W
Active power (max. configuration)	278 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Apparent power (max. configuration)	296 VA
Heat emission	1000.8 kJ/h (948.6 BTU/h)
Leakage Current	leakage current

Compliance	
Germany	GS
Europe	CE Class A * CE label according to EU directives: Low-Voltage Directive 2006/95/EC, Electromagnetic Compatibility 2004/108/EC EN 300386 EN 50371 EN 55022 EN 55024 EN 60950 - 1 EN 61000-3-2 JEIDA EN 61000-3-3
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Japan	VCCI Class A + JIS 61000-3-2
Russia	GOST-R
China	CCC (planned)
Australia/New Zealand	C-Tick (AS / NZS CISPR 22 Class A)
Taiwan	BSMI Class A (CNS 13438, CNS 14336) CNS 13436
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. Additional compliance with: Kenya:KEBS; Kuwait: KUCAS; Nigeria:SONCap; South Africa:SABS; Belarus: STB; Kazahkstan: GOST-K; Ukraine: SEMPRO * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

Components

Storage disks	SSD SATA, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 200 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SAS, 6 Gb/s, 400 GB, SLC, hot-plug, 2.5-inch, enterprise
	SSD SAS, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SAS, 6 Gb/s, 200 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SAS, 6 Gb/s, 100 GB, SLC, hot-plug, 2.5-inch, enterprise
	SSD SAS, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 250 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 3 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 900 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
Backup Drives	DDS Gen5, 36 GB, 3 MB/s, half height, USB 2.0
	DDS Gen6, 80 GB, 6 MB/s, half height, USB 2.0
	LTO3HH Ultrium, 400 GB, 60 MB/s, half height, SAS 3Gb/s
	LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s
	LTO5HH Ultrium, 1500 GB, 140 MB/s, half height, SAS 6Gb/s
	RDX Drive, 160 GB, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 2.0
	RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0
Optical drives	Blu-ray Disc™ Triple Writer, (6x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD-ROM, (16xDVD; 48xCD), half height, SATA I
	DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS Controller	SAS Ctrl. 6 Gbit/s 8 ports ext. PCIe Gen2 x8
RAID Controller	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, Optional BBU (based on LSI SAS2108)
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int. RAID level: 0, 1, 10, No BBU support (based on LSI SAS2008)

Communication, Network	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x1 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 (Fujitsu)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe x8 (Intel®)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu)
Graphics add on cards	NVIDIA® Quadro® NVS 300, PCIe x1, 2x DVI/VGA
Rack infrastructure	Rack Mount Kit
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks
	Cable Arm 2U for PRIMECENTER- and 3rd-party racks

Warranty	
Standard Warranty	1 year
Service level	On-site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years
Service Weblink	http://www.fujitsu.com/fts/services

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX150 S8, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY TX150 S8, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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